

CURRICULUM VITAE

Bonny Christopher
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EDUCATION

San Jose State University, San Jose, CA **2010**

M.A. in Experimental Psychology

Thesis: "The Influence of Binaural Auditory Beats on Vigilance Task Performance and Beta Brainwave Magnitudes"

Honors: Cum Laude

University of Cincinnati, Cincinnati, OH **2006**

B.A. Honors in Psychology

Minor: Philosophy

Honors: Cum Laude, College, and Departmental

Eötvös Lorand University, Budapest, Hungary **2004**

Certificate in Cognition

PROFESSIONAL EXPERIENCE

San Jose State University Foundation, San Jose, CA

Research Assistant

NASA Ames Research Center; Mountain View, CA

2009-Present

Human Systems Integration Division

Flight Cognition Research Laboratory

- Conduct research pertaining to single-pilot cognitive demands and resource management in technically advanced aircraft and very light jets through laboratory and simulator studies.
- Conduct research in human factors issues regarding NextGen development. Specifically the navigation reference system (NRS).

Acceleration Research

2007-2009

- Perform an extensive literature search for a NASA report on gravity, and vibration loading effects on space flight crews.

Human Automation and Integration Laboratory

2006-2007

- Create graphs for a Federal Aviation Agency study in progress "2004-2005 Operational Errors."

Neurobehavioral Rehabilitation, San Jose, CA **2006-2008**

Neurofeedback Assistant

- Prep patients for and run QEEG, neurofeedback, and biofeedback sessions. Instruct patients on how to use home-training equipment and provide technical assistance.

RESEARCH EXPERIENCE

Principal Investigator

2008-2010

San Jose State University, San Jose, CA

- Examined the influence of binaural auditory beats on vigilance task performance and beta brainwave magnitudes. Created experiment using SuperLab. Screened, obtained consent forms, and ran participants through experimental trials. Recorded and analyzed data. Presented experimental results at SPARC in 2009.
- Examined the relationship between stress and topic position on comprehension of scientific writing. Wrote and submitted IRB proposal. Created experiment using SuperLab. Screened, obtained consent forms, and ran participants through experimental protocols. Trained co-experimenters in experimental protocol. Recorded and analyzed data. Presented experimental results at WPA in 2008.

2006-2007

Co-Experimenter

2005-2006

University of Cincinnati, Cincinnati, OH

- Examined the relationship between cognitive load and coordination. Screened, obtained consent forms, and ran participants through experimental protocols. Recorded and organized data.

TEACHING EXPERIENCE

University of Cincinnati, Cincinnati, OH

2005

Teaching Assistant – to Professor Kenneth Ghee in “Introduction to Psychology.”

- Conducted study groups, met with students during office hours and upon request, and graded all written work, including final exam papers.

PAPERS AND PRESENTATIONS

Pruchnicki, S., Burian, B., Christopher, B. (September 2011). Designing realistic, full-mission, human-in-the-loop aviation simulation studies: lessons learned. Unpublished paper presented at Human Factors and Engineering Society, Las Vegas, NV.

Burian, B., Christopher, B., Pruchnicki, S., Cotton, S., *Human factors evaluation of the implementation of the navigation reference system (NRS) Phase 2 report*. NASA study 09-AJP61FGI-0101 and funded through FAA AJP-61. Pp.1-149. June, 2011.

Burian, B., Pruchnicki, S., Christopher, B., *Human factors evaluation of the implementation of the navigation reference system (NRS) Phase 1 report*. NASA study 09-AJP61FGI-0101 and funded through FAA AJP-61. Pp. 1-57. March, 2010.

Christopher, B. (2010). *The Influence of Binaural Auditory Beats on Vigilance Task Performance and Beta Brainwave Magnitudes* (Unpublished master's thesis). San Jose State University, San Jose, CA.

Christopher, B. The Influence of Binaural Auditory Beats on Vigilance Task Performance and Beta Brainwave Magnitudes (2009). SPARC, San Jose, CA.

Christopher, B., Stokes-Gunian, K., Anderson, B., & Rogers, R.F. (2008). A Structuralist Approach to Writing: Does position really matter? Western Psychological Association, Irvine, CA.

Kiefer, A.W., Christopher, B., & Shockley, K. (2008) Influences of coordination dynamics and semantic retrieval parameters during dual task performance. North American Society for the Psychology of Sport and Physical Activity, Niagara Falls, Canada.

Kiefer, A.W., Christopher, B., Shockely, K., & Riley, M.A. (2006) Cognitive Load and Interlimb Coordination Dynamics. International Society for Ecological Psychology, Cincinnati, OH.